

Cultural semiotics, translatability, and informational loss in visual texts of the biotech industry

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Abstract. The paper examines a specific advertising campaign of a biotech company characteristic of the whole biotech industry and discusses how the evocation of universal values, such as the protection and correct management of the planet's resources, the struggle against poverty and against the shortage of raw materials, the support of farmers and their families, distorts information about nature, global agriculture and the biotech industry's products. This distortion is a necessary and vital part of this industry's existence. The rhetorical techniques of conscious informational repression and distortion, which are often discussed only in terms of *informational loss*, are expressly evident and even taken to their extremes in the case of biotechnology. Yet on the other hand they are characteristic of a translation process that takes place in the rhetoric of advertisement in general, as is evident in the use of Göran Sonesson's translation model which we suggest is appropriate for the definition and study of advertising codes.

Keywords: cultural semiotics, translation, visual text, mass communication, biotechnology, critique of technoscience

1. The hope principle of technoscience

Biotechnology is a trillion-dollar industry, as it has been involved in the food and energy complex for over a decade now and has been absorbed by the financial sector at least since 2007. This means that genetic interventions and the use of tissue cultures

has long been an acceptable part of a market that has been expanding and reinventing itself even after the food crisis in 2007–8 and the housing estate crisis (in the US) and financial world crisis since 2008.¹

At the beginning of the past decade, biotechnology was playing a leading role on the epistemological and the Research & Development map of multinationals worldwide. The slogan for the global technoscientific paradigm that was crystallized around 2004 in the US and was soon followed by the EU was *NBIC convergence*; that is the convergence of product research and marketing of Nanotechnology, Biotechnology, Information Technology and the Cognitive Sciences.² Yet even as a highly promoted technoscientific miracle the biotechnology industry has always had to rely on inventing and reinventing its rhetorical justification, i.e. on advertising campaigns that have constantly had to create anew connotations with technoscientific commodities, although there has been no apparent proof or often even knowledge of their safety for humans, animals and the environment. The industry has invested much more money into promoting and selling than into exploring their necessity and safety.

The ideological justification of genetic interventions whether in agriculture, the production of pharmaceuticals and cosmetics, biomedicine or animal breeding, or more recently the textile industry, is based on the mass production of hope as a tool of governance.³ The biopolitical function of earlier epistemological paradigms like nuclear technology, biology and chemistry was based on the promise of eugenic improvement of the racial features of a population, the reassurance of the primacy of weapons of extermination of the enemy in the Cold War, and of abundance of wealth. Now the ideological content of the NBIC technoscientific market has been only slightly modified: its hope principle involves the promise that poverty, ugliness, disease and death can be avoided, postponed or partly lifted by scientific methods alone (where science is held to be something between religion and magic). While the safety and usefulness of biotech in agriculture is still being contested, in fact has never been proved at all, the market of pesticides, fertilizers and GMO seeds and crops

¹ There are several non-corporate sources discussing these issues, see e.g. the non-profit research on <http://corporateeurope.org/>, <http://www.grain.org/>. Specifically for the crimes of Syngenta, see <http://www.corporatewatch.org/?lid=215>.

² The first report funded by the NSA in the US was already written in 2002 by Roco and Bainbridge. The theoretical premises of this report are copied and continued in a number of EU-funded projects, e.g. <http://www.converging-technologies.org/project.html> and <http://www.contecs.fraunhofer.de/content/view/2/3/>.

³ See Yoka "The spectacle of biotechnology, the biotechnology of the spectacle" (2007), accessible at www.order81.gr/2007_02_01_archive.html. The concept that we here describe as "the hope principle" was first criticized thoroughly in the seminal book of *The Critical Art Ensemble* 1998, also available online as <http://www.critical-art.net/books/flesh/>. See also the important yet perhaps excessively moralizing study of the same year by Jeremy Rifkin 1998.

has grown over the last 15 years and in basic foodstuffs like corn, soy and rice GMO products have flooded the global market in extremely high percentages (in the case of soy exceeding 80% in the US). This tremendous incompatibility between scientifically researched and socially approved results on the one hand, and financial speculation on the other, reflects the power of biotech publicity. Our main question here is: within this publicity industry, how have certain technoscientific possibilities been translated convincingly into a global hope principle?

We will isolate an advertising strategy of a biotech company characteristic of the whole biotech industry, in relation to information and high universal values such as the protection and correct management of the planet's resources, the struggle against poverty and against the shortage of raw materials, the support of farmers and their families. We will discuss, using semiotics, how the evocation of such universal values, as well as the interpretation and rhetorical representation of information about nature and global agriculture are translated into strategies of associating certain qualities with a product.

As part of a larger study of the rhetoric of the biotech industry, we shall primarily rely on a single case, i.e. the images used for the multinational agrobiotech company Syngenta in a recent art photography competition with artworks commissioned, selected and exhibited by the company and hosted on its website, as part of its main profile. We shall be examining the work of translation involved in the function of presenting these artworks as advertisements (and vice versa) by co-examining translation theory both from the point of view of traditional Saussurian linguistics and also from a perspective of cultural semiotics as developed by Juri Lotman and the Tartu School and discussed in terms of *structures*, *texts* and *functions* in the *Theses*.

2. Culture and translatability

For Torop (2002: 603) “[i]n the discipline of the semiotics of culture it comes naturally to say that culture is translation, and also that translation is culture”, in the sense that meaning is always something to be transferred from one locus to another, and this metaphoric act is at once an act of translation and an act of culture.

Indeed, also according to a different formulation by Hermans (1998: 15), every act of understanding involves an act of translation of one kind or another. This is a point made by several contemporary philosophers, from Jacques Derrida to Donald Davidson, but also by ethnographers like Edmund Leach, who observed in 1973 that social and cultural anthropologists trying to understand other cultures “have to see that the essential problem is one of translation” (Leach 1973: 772). Then indeed the problem of cultural communication becomes a problem of cultural translatability; for Pym and Turk (1999: 273):

translatability is mostly understood as the capacity for some kind of meaning to be transferred from one language to another without undergoing radical change. In this transfer of meaning, culture plays a prominent role, sometimes limiting the broadness of the translation process and urging certain semioticians to speak of untranslatability.

The possibility of untranslatability raises the issue of the mechanisms enabling or limiting translation between and across languages, registers or media. For instance, the meaning of agriculture in a photograph, a video, a handwritten text, an oral exchange, in French, Ghanaian or Chinese is not only different in each case, it is also more powerful or less powerful depending on the chosen medium within a given structure of communication, it is a more or less effective statement in connection e.g. with a specific product or public, and hence deemed more or less appropriate for specific advertising strategies.

The mechanisms that enable or limit translation and expose translatability to a series of open questions are interwoven with the cultural hierarchy governing each of these languages, registers, media. In other words, some languages, registers, media have more value than others so the loss (or any kind of distortion or change) occurring in translation is always part of a power dynamics within a metaphor. Neither translation nor culture is a value-free process, since meaning itself is the production of value. And every time a translation is acted out, it affects the structure of communication within languages, media, and registers (discourses).

A dangerous broadening of the concept of culture could be the result of such terminological flexibility. Culture, on the one hand (for instance in the excerpt by Pym and Turk), is larger than translation. For Hermans, on the other hand, it is something categorically other to translation, since we can have translation (a process) from one culture (a static entity) to another. Torop, by equating translation with culture, tries to emphasize the fact that both translation and culture are processes. Through examples examined in this paper we hope to expose the urgency of these questions concerning the concept of culture and advertising in an even more pressing way, combining the Tartu School concepts of the semiotics of culture and classical Saussurean concepts of linguistic communication.

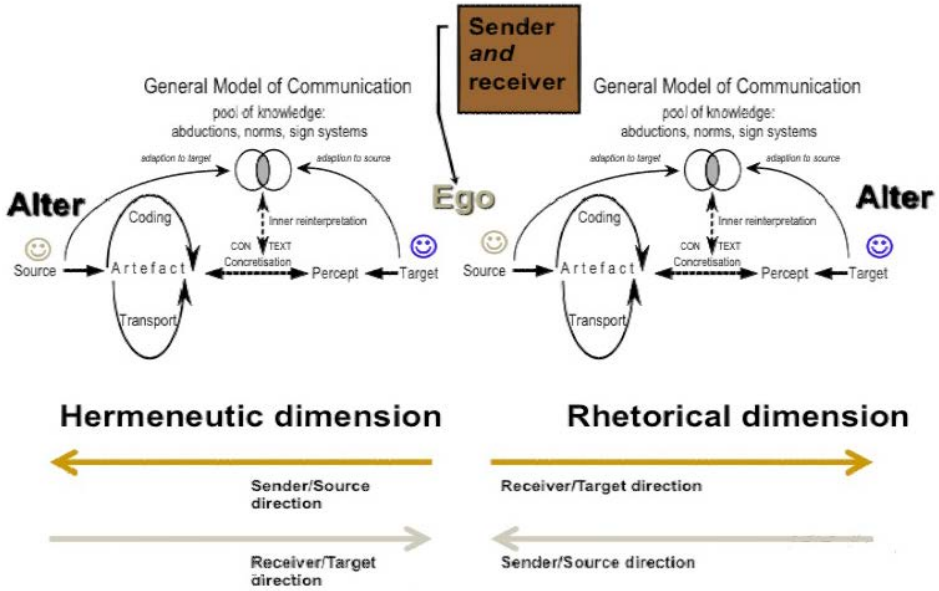
2.1. Advertisement as translation

The identification of communication with culture and of culture with translation does not always account for the basic rhetorical acts that intentionally or unintentionally manipulate and distort the perceived relation (perceived through the source of common prior knowledge that enables communication in the first place) between sign and object. The motive of the reinterpretation (translation) of the source of

common knowledge can either be the enhancement of its comprehensibility and accommodation by the receiver (the concern for the message to be understood or clarified) or, as is the case with advertising, to consciously control and distort the perception of the sign for reasons irrelevant to cognitive comprehensibility and accommodation.

In order to analyse the fundamental advertising methods of the biotech industry, we will propose an approach to advertisement that recognizes advertising's ubiquity and importance in everyday mass communication. This approach takes the advertising message to be a translation, i.e. a basic act of communication. For a more nuanced model of translation, we propose Sonesson's (2014) understanding of translation as a double act of communication, involving, as it were, two distinct moments of transference of a message. One is the mainly interpretative act of the translator as receiver of a message; the other is a mainly rhetorical act of the translator as sender of the (translated) message. It is obvious how this model provides an almost immediate metaphor for the communicative task of the advertiser. The act of translation undertaken by the advertiser also involves a double act of communication. First comes the reception of the message from the common source of knowledge available to the translator and the public in relation to the text, in this case the advertised product. Then comes the re-presentation of text (the advertised product) by the advertiser (a receiver now turned sender) towards the target of the message. In Sonesson's schema (Schema 1), we propose that *ego* be replaced by the translator and *alter* by the targeted public of the advertisement.

A qualification is necessary here: when we speak about translation in the abstract (whether intra-, or interlingual, inter- or intra-pictorial, intersemiotic according to the registers of communication used in the source text and the target text), we fail to address a very basic pattern of intention that is usually inherent in translation: the act of translation immediately brings to mind comprehensibility and the quest for maximum accommodation (understanding) of the message by the target/receiver. The main difference between this perceived role of translation and advertising is that advertising has another primary function (in the sense of intention on the part of the sender): the message has to create associations with a certain product – so comprehensibility and accommodation of the message is not of primary importance, and definitely not as crucial as the assimilation of the message on the part of the receiver.



Schema 1. The double act of communication known as translation, with its hermeneutic and rhetorical dimensions (Sonesson 2014: 92).

In advertising this condition of accumulation without accommodation of the message is almost a prerequisite: the message reaches the receiver (target) not in order for the message to be decoded and understood (accommodated) for its truth claim (its value of interpretation) but decoded and passively or actively assimilated, (passive assimilation here being the knowledge of the existence of a product and its cultural association, active assimilation meaning becoming interested in relating to the advertised product). Accordingly, the notion of *informational loss* differs in the case of translation and advertisement, since the intention of the act of translation, the transformation of an interpretative to a rhetorical act can be radically opposed to that of advertisement.

2.2. Informational loss as an “intermediate semiosphere”

As is clear by now, we do not use language in the sense of a natural language but in the “specifically semiotic sense” described by Uspenskij et al., which is applied “also to any carrier of integral (textual) meaning – to a ceremony, a work of the fine arts, or a piece of music” (Uspenskij et al. 2003[1973]: 297).

For Lotman and Pjatigorskij (1969: 211), a message can be considered a text when it is “open to later translations and interpretations”, a thesis which Sonesson (1998:

83) later reformulates: “[The text] may also be described as that which is (should or could be) subject to interpretation”. Especially in the case of art, it is important to stress its “sender-oriented” message in comparison to the “target-oriented” language of advertisement. Sonesson (2013: 12) talks of sender- and receiver-oriented sign systems and makes an important distinction: “Art, as conceived in the 20th century” he writes, “has been characteristically sender-oriented; mass media, in the received sense of the term (which is not really applicable to all modern media) have been receiver oriented”.

For Greimas and Courtés (1993: 398), translatability seems to be one of the fundamental properties of semiotic systems and forms the basis of the semantic process. Semiotic systems can be translated, and their translation is the process where informational loss occurs, whether because of a strategic choice of the producer of the cultural text, or as the effect of cultural dynamics.

To what extent are these semiotic systems themselves cultures, semiospheres or translations? What are the limits of semiospheres as opposed to translatability processes intervening in the cultural system? We could schematize a first response to this seemingly purely theoretical question: when one semiosphere is translated into another, an intermediate semiosphere is temporarily created which is then suppressed – this is the semiosphere carrying the informational loss and the rhetorical mechanisms responsible for this loss – let us say, the political management of the sign.

The aim of this intermediate, temporary, political, semiosphere (the “rhetorical technique”, the medium, the “metaphorical smoke”, the hard-to-detect perceptual switch) is to produce the effect of equivalence. The translated semiosphere has to appear more or less intact in its translated representation, and this semblance of *formal* equivalence, i.e. equivalence of signifiers of the two semiotic systems, is the job of this intermediate semiosphere, the sphere where informational loss is, as it were, manufactured. This notion of an intermediate sphere is useful, even though it creates an *ad absurdum* infinite creation of semiospheres, for it accounts for the fact that semiosis occurs within systems of meanings with different, competing, cross-destructive, or cross-complementary (even self-destructive) semantic values.

2.3. Equivalence, advertisement and the informational loss in the communication act of advertisement

The contribution of the notion of *equivalence* in cultural translatability, as a function of controlling informational loss, has been often underlined by scholars of the semiotics of culture. According to Uspenskij et al. (2003[1973]: 311) in their collective *Theses*, “translation from one system of text to another always includes a certain element of untranslatability”. Untranslatability is detected in the function of equivalence from one semiotic system to another. Yet this is a rather circular problem: how do we define

equivalence when, as we read again in the *Theses*, “[o]ne of the fundamental problems of the studies of semiotics and the typology of cultures is the formulation of the question of the equivalence of structures, texts, functions” (Uspenskij et al. 2003[1973]: 311).

For Lotman, structures seem to refer to overlapping semiospheres: “The semiosphere”, he writes, “is that same semiotic space, outside of which semiosis itself cannot exist” (Lotman 2005[1984]: 208). Taking into account the remarks on equivalence, we could postulate from this that every semiosphere has its own structures, texts, functions, yet also shares structures, texts and functions with other semiospheres.

Do we need a concept of structure that is broader than the concept of text, and a concept of text that is, in turn, broader, or categorically different from function, in order to combine and productively understand Lotman’s formulation of the semiosphere and this introductory remark in the *Theses*? Does there exist a hierarchy (from sphere down to structure, down to text, and finally to function) and is this coeval to a hierarchy of the truth content of signs with a referential function, or their *reality* value?

Translation will draw its informational material from those elements that the translated and the translatable semiospheres have in common. If the advertising message carries any of Jakobson’s (2003[1963]: 214) dominant referential function of signs, it is not exactly clear in Syngenta’s advertisements that we are discussing here which is the signified *reality*, and what the truth value of statements about this reality – e.g. the signified reality of agriculture or of planetary ecology – is.

3. Two photographs from the Syngenta International Photography Awards Exhibition *Rural-Urban 2013*

If we turn to Barthes’s classic analysis of photographic messages (Barthes 1977: 15–16), we might find an apt description of this contradiction between semiospheres, a contradiction that is covered up by a transformation (which is strategic, systematic, structural, and affects the whole translation of structure, text and function) of the rhetoric of referential information into a rhetoric of persuasion. Barthes talks of a structure of the photographic message which communicates with another structure, that of the text. Being semiotically heterogeneous, these two structures might converge, but they cannot be mixed and subsumed into each other. This is reminiscent of Lotman’s own reference to structures across which translation takes place.

Instead of immediately stating that Syngenta’s advertisements are pure nonsense in terms of their informational value, we shall proceed from a reverse position, and will try to detect this fundamental deception in lacunae, blank points, in the convergence of sign systems of texts and images in the advertisements themselves. Advertising

as a rhetorical mode has always been fully dependent on its medium. Very early on, it actually managed to merge image and texts, closely following developments in representational and reading technologies.

Barthes's simple realization of an interrelation and interdependency of the medium of photography with the medium of the written text is a first step towards challenging the truth claims of Syngenta's commissioning and sponsoring of an international photography exhibition on the themes of ecological disasters, human suffering because of that, and the beauty of nature. The content (theme or *sujet*) of these photographs was not related to the texts describing them, but to the structure of information within which they become available and readable for the viewer.

Syngenta's photography exhibition is a case in which a multinational responsible for deforestation, water shortages, driving away farmers from land and making them dependent on the company through credit and direct debts, is also a political advocate of environmental and social justice. The company commissions an ecological theme like deforestation or water shortage – a reality which is, ironically, the direct result of the activity of such companies. However, the company is not mentioned as responsible for the bleak landscapes in the photographs, but as the latter's sponsor. The industrial sponsor acts like a supporter of the arts, while the content is inherently critical of the activity of the company. What kind of publicity strategy are we dealing with here? As long as the name of the company can keep being associated with sustainability and awareness of environmental dangers, it can sponsor and accommodate also its own – indirect – critique.

The problem here is not locating semiotically the paradox in the use by a company like Syngenta of high art about ecology in order to sell environmentally destructive products. At what point of the signification/representation process concerning the activity of the company are we actually confronted with fundamental lies? We argue that this happens in this intermediate sphere where informational loss is constructed in a move from interpretation to rhetoric. More specifically: the leading linguistic message on Syngenta's website is "[t]here is increasing pressure on rural communities to produce enough food. In 1950, a hectare could feed two people. By 2030, it will need to feed five people".⁴ This basic text is presented in a coloured rectangular frame, thereby implying its factual character, i.e. the informational/documentary function of the message.⁵

The second linguistic message is longer and serves to explain and elaborate on the content of the first. It contains statistics and arguments connecting world hunger to population growth, soil erosion and urbanization as well as statements about the need

⁴ See <http://ruralurban.syngentaphoto.com/the-exhibition/food-production/index.html>.

⁵ According to Sonesson (1996: 86), "[...] the plastic layer may well function iconically. Thus, for instance, [...] the rectangle signifies hardness [...]"

for sustainable ecosystems. Like the first one, it very carefully carves out the right linguistic environment for the positioning of its own role.

Food Production.

We lose a football field of farmland every second to soil erosion and urbanisation. At the same time, global population is expanding at a rate that means we need to produce more food in the next 50 years than we did in the last 10,000. How to accomplish this sustainably is the 21st century's greatest challenge, because:

- while nearly a billion people worldwide are starving or malnourished (including a large proportion of farmers), a similar number are overweight, and up to a third of all global food production is lost or wasted each year.
- if we don't want to encroach upon forests to make space for more agriculture, we need to produce more food from existing cultivated land.
- competition for water increases between urban and rural environments and access to water is the biggest limiting factor in the world's ability to feed itself.

The future success of agricultural economies and global food security depends upon sustainable ecosystems and healthy communities. With this in mind, even those in urban areas need a better understanding of agriculture.

These messages/linguistic semiotic systems are accompanied by photographs/pictorial semiotic systems. Let us focus only on two. The first photograph (Fig. 1) seems to carry a clear informational content: a white man in a modern poultry feeding unit. The referential function, in the sense given to the term function by the authors of the *Theses*, seems to be dominant here.

There is a key contrast in the picture that corresponds to (we could say – that intersemiotically translates) a key concept in the linguistic/textual messages accompanying the photographs: it is the contrast between the one man and the mass of chickens he is feeding. The concepts of overpopulation and the pressure to produce enough food by rural communities seems to be intersemiotically depicted in this photograph by an individual working in an overpopulated feeding unit amidst the food which must be produced in sufficient quantities.



Figure 1. Henk Wildschut, Range Chickens [sic.] 12.000 m² Food.⁶

The same antagonism of too much (too many people) and not enough (not enough food) in the field of production (agriculture, farming) is played out in the second image (Fig. 2), now in different iconic terms. Here the poetic function is more prominent than the alleged referential one (it is not styled as a documentary photography like the first one). Here, again, the concept of the individual during the productive process (on the field) is central.



Figure 2. Brent Stirton. Food for Foreigners.

⁶ Figure 1 and Figure 2 have been retrieved from www.ruralurban.syngentaphoto.com/the-exhibition.

This time the individual is a black man as the vertical axis of the symmetrical composition. This symmetry of cultivated land and sky and half-planted body seems to be implying that the African farmer is a product of the earth and the producer of the earth at once. The iconic signs associate agriculture with nature, and the black farmer with the land cultivated with Syngenta (even though – how ironic! – the content of the photograph, as described by the artist himself under his work, is associated with the critique of landgrabs by American companies in Africa and the resulting water shortages).

For our purposes here – and that goes for most advertising messages – Sonesson's (1994: 322) remark, "[n]o doubt pictures offer us much less linguistic information than verbal texts" is quite useful. Yet we would rather say that in such cases, where the information withheld and the information revealed must be very carefully controlled, pictures can keep a balance of ambiguity, uncertainty and confusion that is much more difficult to maintain in a written text.

In other words, the informational loss in the first picture has to do with the ambiguity of the viewer's stance towards the picture in relation to the company's products: is the breeder offering good service to the global community by enduring the hardships of his profession aided by the multinational's products and services, or is he going to be saved by the company's solutions to the problems of "not enough production" for "too many people"?

In the second picture, again, we cannot be certain about the role placement of the products and services of Syngenta within the scene. Is the black farmer an African or a Latin American child of the earth and angel/mediator between the earth and the living – which of the company's projects is it alluding to? Is he working in a rice field (involving a farming commodity whose grains sold by the company are to a large extent genetically modified) or another kind of successful cultivation that the company is about to launch or which it only supports with pesticides and fertilizers?

4. The semiotic structure of advertising as translation

Syngenta's basic oppositional pattern, confusing and conflating high-art and documentary modes of address, entails too many people on the planet/not enough food on the planet → pressure that can be relieved by the company's products. Here the company seems to be saying that it will function as a solution to a problem (food shortage leading to poverty) *described* in the *factual* photographs.

It is interesting here that the pattern thematizing agriculture as a global problem with a global solution begins with a false premise. This false initial statement (the platitudes about overpopulation and food shortage, or about poverty being the result of lack of sufficient technoscience commodities) is the primary establishment

of informational loss (in this case disclosure) that has occurred in the intersemiotic translation from word to picture (although another has already occurred intra-textually, if the whole advertisement is taken to be a text).

How do we speak of the *Theses*’ “Structures, Texts and Functions” (Uspenskij et al. 2003[1973]: 311) in this case? What are the semiospheres involved here? Both the religious semiosphere (the idea of the magical multiplication of food) as well as the semiosphere of development (the Enlightenment ideal that education and technology will bring overall social progress) play their part here within an intermediate semiosphere that will allow the semantic confusion and the (disguised) transition from interpretation to rhetorics.

So the structure of the rhetoric is basically: (1) Water and food shortage is a result of overpopulation. (2) The development and underdeveloped status of certain countries is the result of a natural, i.e. an ahistorical asymmetry. (3) Development is a kind of heaven towards which the underdeveloped nations should strive. (4) Agro-giants are able to help alleviate hunger, poverty, lack of education and skills.

Syngenta is employing an extremely successful intersemiotic device. High art photography in the case of the Syngenta-sponsored competition is used for its association as a sender-oriented respectable medium, with a sensitivity and also awareness of its own content. It is in this crux that the commissioned theme (environmental problems) acquires an association with a higher truth content. In this sense, art photography and documentary photography converge. Semiotically speaking, the rhetorical act of the advertiser is hijacked (is left to be confused with) the (commonly perceived of as) interpretative and sender-oriented work of the artist.

4.1. Specific conditions and structure of communication

It is interesting that our examples belong to a propaganda device dear to the whole biotechnology industry. This device depends on a specific condition of communication: 4,000 biotech companies have had, over the last 25 years, to create a *front* (consisting of PR agencies, consultation bureaus, advertising companies, product placement research companies etc), concerned with legitimizing biotechnology in general in the eyes of the public and the farmers. So many thousands of large, medium and small companies are hosted in a single website (www.bio.org), basically concerned with the intermediate semiosphere of representing the sign (nature, agriculture, poverty, happiness) in relation to the general necessity and safety of the biotech business.

The Syngenta exhibition works are not photographs promoting a specific company by excluding others, by competing over which company delivers a better product than its rival. The competition between rival industrialists and company competition here does not seem to play the definitive role, since the important task of creating positive

connotations with (and thus legitimizing as safe and even necessary) all biotech products seems to override the importance of public opinion of a specific biotech multinational.

If high art documentary photography is one intersemiotic device used to translate the company's advertising texts, it is also part of a technology, the internet, with its own special conditions of communication. This technology has certain conditions of access, presentation, hyperlinks and browsing possibilities. It offers interaction but also much less control with maximum accessibility. In other words, newspapers and TV cannot carry the front's advertisements. It is interesting that in 1997 one of the biotech giants (Biotech Watch 2013: 83–87, 85–86) had been reported to have published a memorandum to its employees that “public debates [on genetically modified organisms] should be avoided, they are battles easily lost [...]”. Indeed there was too much public outcry against biotechnology in agriculture at the beginning of the previous decade. There is definitely a caution that is also expressed by the front's spokespeople realizing that, if the companies are not careful, too much money would have to be spent on lawsuits.

4.2. “Commercial semiotics”, communication and accommodation of meaning

There are two kinds of commercial semiotics: the analysis of marketing strategies for the sake of analysis and understanding on the one hand, and the employment of the optimal marketing strategies with the aim to maximize profit. Of course the difference is hard to see. It is a matter of scholarly ethics, general ethics and politics. One trend in the field of commercial semiotics which presents itself as a legitimate object of study, following more or less the rules of other disciplines, is in fact oriented towards examining the best ways to manage signifiers in association with a persuasion strategy (Umiker-Sebeok 1987; Beasley, Danesi 2002). This intention is not coeval with the truth-seeking aims of other disciplines, whether it is the humanities or the social sciences or the life sciences and the traditional natural sciences. And if communication in advertising is not aimed at understanding, it is important to analyse advertisement as translation and also advertisement as a special kind of translation (see 2.1).

The playing around of signifiers within the semiosphere of the biotech industry's advertising semiospheres is indeed indifferent in relation to any truth claims. The signs *nature*, *poverty*, *hunger*, *overpopulation*, *development* are based on a well-established false construction of their connection to each other and on the links between these signs and their objects and a crucial part of this falsifying method can be described in terms of translation theory: in the double act of communication that is advertisement *cum* translation, the act of the translator/advertiser's interpretation is

intentionally confused with the rhetorical act of representing the signifier on the part of the translator/advertiser.

5. Conclusion

It is interesting that if translation is a double act of communication, then the sender-oriented translational communicative act of an advertisement, involving all the elements described by Sonesson in relation to space and code, must be phenomenologically interpreted as a *double, but integrated* act of communication that is also more *closed* and specific in terms of its relation to the signs (the signified of the object-signifier).

In other words, there is a special arbitrariness development in advertisement and the rhetorics of commerce in general, where the relationship to the signs can be to a very high extent fictional, to the degree that it could be called distorted in relation to the truth claims of the statements issued. In this sense, the mere work or intra- and intersemiotic exchanges, involving pictures, animated pictures, words and imagetexts, might serve as a further diversion from the fact that the signs are falsified.

The advertiser as translator, if we apply Sonesson's model of translation, as an actor in a double act of communication, one involving receiving, another involving sending a message, has a hermeneutic and a rhetorical task (see Schema 1). The resources common to sender and receiver are basically two, one for the act of the advertiser/receiver interpreting the *pool of knowledge* about biotechnology in our case, another for the act of rhetorically addressing their public through advertising. The second pool of knowledge is considered to contain some common and some new elements: the common elements are allegedly the *overpopulation* argument, *the need for more growth*, the correlation of overpopulation and the poverty/hunger syndrome, as well as the correlation between "more agricultural production/more food/less hunger". The new elements are supposed to be the contribution of Syngenta's products.

Yet what is happening here? There is a sense in which we see that the common aspects of the *pool of knowledge* and *common resources* are confused with the pool of interpretation and this is a socio-historical dimension that must be taken into account in the critique of mass communication in general. The *informational loss* is the effect of the *rhetorical*, not the *interpretative* activity! Overpopulation and its correlation with hunger is a contested view, and when it is taken for granted as belonging to the *pool of interpretation* of common knowledge what is happening is a falsification of the signs in the resources.

So indeed, through this model of communication and the incorporation into this model of a model of translation as a double act of communication, where the first act and the second act are distinguished by a moment of management of a common pool of information, can help us better analyse a dominant part of today's communication.

The tradition of the Tartu School semiotics of culture and the specific understanding of *structure, text, function* in the *Theses*, combined with rhetorical analysis, help us elaborate on ideas of media theory useful in both translation theory and advertisement analysis.

The notion of advertising as a specific kind of translation will enable us to describe the double act of communication taking place in advertisement as an *ex definitio* act of deception as to the intentions of the message (intentional severing of the perceived relationship between sign and object): one basic strategy in the ads of the biotech industry as we have shown, is the confusion of the rhetorical address with the intention to interpret; another to suppress the first act of interpretation and exchange it for a rhetorical act completely sidestepping or even distorting the truth claims. In the case of the biotech industry, all this is easy to detect, since it is an industry that has needed to create an “advertising front”, exactly because its profits are based on products with no self-evident necessity or other value.

The biotech industry offers a very characteristic example of what advertising can do: an intermediate semiosphere creating new registers of reference that will serve as context for a product can be the distorting mirror (a machine of deception) for a statement claiming high truth content. Indeed, Syngenta correlates productivity, hunger concerns about food and planetary ecology in an arbitrary way.

In the case we have examined, the arbitrary signifier is life itself. Different epistemologies are employing different, even opposing, views of what is recognized as life and its limits, and subsequently also to what extent the matter of life can be manipulated and marketed. Life is the proclaimed raw material of genetic interventions and the biotech business, and if life is the arbitrary signifier, the act of deception in the biotech industry’s ads is perhaps one of the most radical examples of the deceptive character of mass communication.

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Семиотика культуры, переводимость и инфопотери в визуальных текстах биотехнологического производства

В статье рассматривается конкретная рекламная кампания одной биотехнологической фирмы (репрезентативной для всего биотехнологического производства). Автор говорит о том, что при обращении к таким универсальным ценностям, как защита ресурсов нашей планеты и разумное хозяйствование, борьба с бедностью и нехваткой сырья, поддержка фермеров и их семей, искажается информация, касающаяся природы, глобального сельского хозяйства и продуктов биотехнологического производства. Такое искажение является важным и необходимым фактором для существования данной отрасли. Риторические техники сознательного подавления и искажения информации, часто рассматриваемые в терминах инфопотерь, особенно наглядно представлены в

биотехнологии. В то же время они характерны для процесса перевода, для всей риторики рекламы. Это наглядно показывает модель перевода Герана Сонессена, которая, по нашему мнению, идеально подходит для дефинирования и исследования рекламных кодов.

Kultuurisemiootika, tõlgitavus ja informatsioonikadu biotehnoloogiatööstuse visuaalsetes tekstides

Artiklis vaadeldakse kogu biotehnoloogiatööstust iseloomustava biotehnoloogiafirma üht konkreetset reklaamikampaaniat ning analüüsitakse, kuidas selliste universaalsete väärtuste poole pöördudes, nagu seda on meie planeedi ressursside kaitsmine ning õige majandamine, võitlus vaesuse ja toorainepuudusega, farmerite ja nende perede toetamine, moonutatakse looduse, globaalse põllumajanduse ning biotehnoloogiatööstuse toodete kohta käivat informatsiooni. See moonutus on antud tööstuse olemasolus tähtis ja vajalik tegur. Informatsiooni teadvustatud allasurumise ja moonutamise retoorilised tehnikad, mida sageli käsitletakse üksnes infokao terminites, tulevad biotehnoloogia puhul otseselt ilmsiks ning saavutavad isegi äärmuslikkuse. Samas on need iseloomulikud tõlkeprotsessile, mis leiab aset reklaamiretoorikas üldse, nagu ilmneb, kui kasutada Göran Sonessoni tõlkemudelit, mis meie hinnangul sobib reklaamikoodide defineerimiseks ja uurimiseks.